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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,679	11/28/2003	Hirotoishi Ishida	245089US0RE	9590

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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER
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TRAN LIEN, THUY

ART UNIT	PAPER NUMBER
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1761

NOTIFICATION DATE	DELIVERY MODE
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08/03/2007

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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## Office Action Summary

Application No.

10/722,679 ; 90/007,160

Applicant(s)

ISHIDA ET AL.

Examiner

Lien T. Tran

Art Unit

1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-7 and 11-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-7, 11-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_.

Art Unit: 1761

The 112 rejection and the objection to the amendment and declaration are hereby withdrawn.

Claim 12 is rejected under 35 U.S.C. 251 as being improperly broadened in a reissue application made and sworn to by the assignee and not the patentee. A claim is broader in scope than the original claims if it contains within its scope any conceivable product or process which would have infringed the original patent. A claim is broadened if it is broader in any one respect even though it may be narrower in other respects.

The rejection is maintained because MPEP 1412.03 states that there is broadening if the patent owner would be able to sue any party for infringement who previously could not have been sued for infringement. The original patent claim 12 recites a "drink composition". Applicant now amended the claim to recite "a method for preparing a drink composition". Patent owner could now sue a party practicing the claimed method for preparing a drink composition, who could not have been sued for infringement before.

Claims 1, 3-7, 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishii et al ( US 2002/0037350A1) in view of Wakamatsu et al. ( 4835301)

Ishii et al disclose a sweetener composition comprising DMB-APM which is known as neotame and AceK. The amount of DMB-APM is between .1-35% by weight of the total amount of DMB-APM. The amount of AceK is between .5-85%. The sweetener composition can be in the form of a powdery mixture comprising DMB-APM together with AceK. The mixture can contain diluent or bulking agents such as sugar alcohol, dietary fiber, sucrose, glucose and the like. The composition is used in various

foods and drinks including carbonated and non-carbonated beverages. Test Samples 3,4 shows several carbonated cola solutions containing DMB-APM and Ace K composition. Example 2 shows the preparation of cola base solution in which the composition is added potable liquid. ( see paragraphs 0009,0010, 0014, 0013, 0075).

Ishii et al do not disclose the DMB-APM is a C-type crystal, the X-ray diffraction peaks and the water content.

Wakamatsu et al disclose a process for producing stable aspartame. They teach that aspartame has two types of crystals I and II. Type II crystals are less hydroscopic and has good flow and storage stability. Type II differs from type I in the moisture content and is formed by drying Type I to obtain a water content of less than 3%, specifically 2.1, 1.5, 1.8 etc.. ( see examples 2-13 on column 3 and col. 1 lines 10-15)

It would have obvious to one skilled in the art to further dry the neotame to obtain crystal with lower moisture content as taught by Wakamatsu et al to obtain the properties taught by Wakamatsu et al. While Wakamatsu et al teach drying aspartame, the same end result will obviously be obtained with neotame because both are artificial sweeteners. The X-ray diffraction peaks are inherent properties of the sweetener; it is obvious the DMB-APM has such peaks when it is dried to a low moisture content. Since the composition is the same claimed, it is obvious the improvement in dissolution is obtained when the composition is used in a liquid.

Claims 1, 3-7, 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. in view of Wakamatsu et al (4835301)

Anderson et al. teach synergistic combinations of sweeteners including d-tagatose with binary sweetener mixtures select from a group including Acesulfame-K and Neotame. The ratio of D-tagatose to the other sweeteners is 1:5, and for a beverage formulation Neotame is preferred.

Anderson et al. are silent in teaching a particular level of powdered Acesulfame-K, the neotame is a C-type crystal, the X-ray diffraction peaks and the water content of the neotame.

Wakamatsu et al disclose a process for producing stable aspartame. They teach that aspartame has two types of crystals I and II. Type II crystals are less hydroscopic and has good flow and storage stability. Type II differs from type I in the moisture content is formed by drying Type I to obtain a water content of less than 3%, specifically 2.1, 1.5, 1.8 etc.. ( see examples 2-13 on column 3 and col. 1 lines 10-15)

It would have been obvious to one skilled in the art to determine the amount of Acesulfame-K together with the neotame that would give the optimum degree of sweetness, flavor, taste to the product in which the composition is used in. Such determination can readily be determined through routine experimentation with various amounts to determine the most optimum ones. It would have obvious to one skilled in the art to further dry the neotame to obtain crystals with lower moisture content as taught by Wakamatsu et al to obtain the properties taught by Wakamatsu et al. While Wakamatsu et al teach drying aspartame, the same end result will obviously be obtained with neotame because both are artificial sweeteners. The X-ray diffraction peaks are inherent properties of the sweetener; it is obvious the DMB-APM has such

peaks when it is dried to a low moisture content. Since the composition is the same claimed, it is obvious the improvement in dissolution is obtained when the composition is used in a liquid.

Claims 1,3-7, 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nofre et al ( 5480668) in view of the article by Schiffman et al and Wakamatsu et al ( 4835301).

Nofre et al disclose a sweetening agent which is a neotame. The sweetening agent can be employed in an edible product by itself or in combination with other sweetening agents such as aspartame, alitame, acesulfame etcc.. ( see col. 4 line 50 through col. 5 line 10, col. 6 lines 16-25)

Nofre et al do not disclose suing acesulfame-K in the amount claimed, the neotame is a C-type crystal, the X-ray diffraction peaks and the water content of the neotame, using powder forms of the sweetening agents and using the sweetening agents to prepare drink

Wakamatsu et al disclose a process for producing stable aspartame. They teach that aspartame has two types of crystals I and II. Type II crystals are less hydroscopic and has good flow and storage stability. Type II differs from type I in the moisture content is formed by drying Type I to obtain a water content of less than 3%, specifically 2.1, 1.5, 1.8 etc.. ( see examples 2-13 on column 3 and col. 1 lines 10-15)

Schiffman et al teach it is well known to mix high potency sweeteners have synergistic sweetening effect including powdered Acesulfame K in combinations with other high potency sweeteners. ( see pages 105, col. 2, page 118, col. 1, tables 2-3)

It would have been obvious to modify the sweetener composition of Nofre et al and include powered Acesulfame K since Schiffman et al teach adding Acesulfame K to other high potency sweeteners to have a synergistic sweetening effect and thus to improve the sweetness of the product that the agents will be used in. It would have been obvious to one skilled in the art to determine the amount of Acesulfame-K together with the neotame that would give the optimum degree of sweetness, flavor, taste to the product in which the composition is used in. Such determination can readily be determined through routine experimentation with various amounts to determine the most optimum ones. It would have obvious to one skilled in the art to further dry the neotame to obtain crystals with lower moisture content as taught by Wakamatsu et al to obtain the properties taught by Wakamatsu et al. While Wakamatsu et al teach drying aspartame, the same end result will obviously be obtained with neotame because both are artificial sweeteners. The X-ray diffraction peaks are inherent properties of the sweetener; it is obvious the DMB-APM has such peaks when it is dried to a low moisture content. Since the composition is the same claimed, it is obvious the improvement in dissolution is obtained when the composition is used in a liquid. It would have been obvious to use the sweetening composition in drink because such usage is well known in the art.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140

Art Unit: 1761

F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1,3-7, 11-17 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-6 of copending Application No. 09/355980 in view of Wakamatsu et al.

Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications are directed at sweetener composition comprising DMB-APM and Acesulfame K wherein the amount Acesulfame-K in the copending case is in amount of .5-85%. The copending application does not disclose the DMB-APM as C-crystal.

Wakamatsu et al disclose a process for producing stable aspartame. They teach that aspartame has two types of crystals I and II. Type II crystals are less hydroscopic and have good flow and storage stability. Type II differs from type I in the moisture content and is formed by drying Type I to obtain a water content of less than 3%, specifically 2.1, 1.5, 1.8 etc.. ( see examples 2-13 on column 3 and col. 1 lines 10-15)

It would have obvious to one skilled in the art to further dry the neotame to obtain crystals with lower moisture content as taught by Wakamatsu et al to obtain the



Art Unit: 1761

properties taught by Wakamatsu et al. While Wakamatsu et al teach drying aspartame, the same end result will obviously be obtained with neotame because both are artificial sweeteners. The X-ray diffraction peaks are inherent properties of the sweetener; it is obvious the DMB-APM has such peaks when it is dried to a low moisture content. It would also have been obvious to use powdered form of the sweeteners when a granular composition is made.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

In the response filed 12/22/06, applicant argues there is not rationale on how the disclosure of one sweetener can suggest to modifying another sweetener and the standard is an "obvious to try". The argument is not persuasive. The changing of the sweetener to C-crystal does not involve any reaction or alternation of the structure. The changing of the crystal type only involves drying the sweetener to a certain moisture content. Ishii et al disclose the sweetener composition is in the form of a powdery; this indicates that both of the sweeteners can be dried. Thus, if aspartame can be dried to a moisture content of less than 3%, it is obvious neotame can be dried to a moisture content of less than 3%. One would be motivated to obtain the C-crystals because they are less hygroscopic and have good flow and storage stability as shown by Wakamatsu. Furthermore, neotame is not just any sweetener; it is a modified aspartame. Thus, if aspartame can be dried to less than 3% moisture content to make it less hygroscopic and to improve flow and storage stability, it would have been obvious to do so to neotame to obtain the same properties.

Applicant makes the same argument with respect to the rejections over the Anderson and Nofre references. The argument is not persuasive for the reason set forth above.

The double patenting rejection is maintained for reason of record.

Applicant makes reference to an IDS submitted in which testing was carried out to confirm if pure C-type crystals of neatame were obtained under the conditions disclosed in Patent no. 5480668 and 5728862. The evidence submitted cannot be considered because it needs to be submitted in a form of a 132 declaration, not as an IDS. Also, the submission is not understood because it is not proposed in the rejection to form C-type crystal according to the process in the two references referred by applicant. In fact, patent no. 5728862 was not even used.

Applicant's arguments filed 12/22/06 have been fully considered but they are not persuasive.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 1761

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lien T. Tran whose telephone number is 571-272-1408. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks, can be reached on 571-272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

June 25, 2007

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*Lien Tran*  
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PRIMARY EXAMINER  
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